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PHS :

Dated: 26.10.18

Joint Seminar organized by
Department of Physics and Humboldt Academy of Chandigarh

SPEAKER: Prof. Jurgen Bosse
Fachbereich Physik Freie University at Berlin
Berlin, Germany

TITLE: Forced Oscillations – for pedestrians and advanced students

DATE & DAY: 31 October 2018 Wednesday

VENUE: Physics Seminar Hall

TIME: 4.00 P.M.

Abstract: I will review the forced-oscillations equation of motion and its unique steady-state solution, which all science and technology students have learned about in their first math courses. I will discuss the solution in terms of relaxation function, response function, and dynamical susceptibility. Although these concepts are conventionally introduced only at a later stage (i.e., in many-body theory), the damped oscillator offers an excellent opportunity for their introduction and thorough understanding. Remarkably, any physical system will respond to a small external perturbation in terms of a forced-oscillator's steady-state solution - albeit with a different, much more complicated and usually unknown response function. Often, however, the latter is well approximated by the oscillator response function. That explains the frequent use of the damped-oscillator model in many different fields of science and technology.

About the Speaker: Prof. Jurgen Bosse, Fachbereich Physik Freie Universität at Berlin, Germany is a theoretical Condensed Matter physicist with interests in dynamical properties of quantum fluids, glass transitions, Bose-Einstein condensation, current correlations of trapped low temperature gases. He held visiting professor positions at various Institutions, MIT, U.S.A., Kyoto University, Japan; Panjab University, Chandigarh; IIT Roorkee etc.

All interested are cordially invited to attend.

Prof. Alok Srivastava
President
Humboldt Academy of Chandigarh

Prof. Navdeep Goyal
Chairperson
Dept. of Physics